BASIC GUIDE:
DOING BUSINESS WITH

MISSION

DARPA has a singular mission: to make seminal investments in breakthrough technologies for national security. Through its investments, DARPA catalyzes the development of new capabilities that give the Nation technology-based options for preventing-and creating-strategic surprise.

PERSPECTIVE

Today, DARPA is helping to build a future in which we can do extraordinary things: Fully control the electromagnetic spectrum for communications, sensing, and imaging; provide precise and accurate position and timing that isn't dangerously reliant on GPS; field cyber as a military capability with confidence in our own cybersecurity; increase access to and through space by lowering its cost; and open new operational regimes with advanced platforms and weapons. To build a strong foundation for tomorrow's military systems, we are also catalyzing an advanced technology base in new areas of information technology, electronics, and materials science, as well as new technologies emerging from the biological sciences.

RESEARCH AT DARPA

AEO — **Adaptive Execution Office**
Technology, Adaptability & Transfer

BTO — **Biological Technologies Office**
Biology, Technology & Complexity

DSO — **Defense Sciences Office**
Discovery, Modeling, Design & Assembly

I2O — **Information Innovation Office**
Information, Innovation & Cyber

MTO — **Microsystems Technology Office**
Electronics, Photonics & MEMS

STO — **Strategic Technology Office**
Networks, Cost Leverage & Adaptability

TTO — **Tactical Technology Office**
Weapons, Platforms & Space

Additional information on technology offices – including focus areas, current programs, news & events, solicitations, and program manager information – may be found on the DARPA website (www.darpa.mil). Simply click on "Our Work" and click on the relevant technology office. If you are viewing this document online – the above icons are hyperlinked.

Established in 1958 as part of the U.S. Department of Defense, DARPA is designed to pursue opportunities for transformational change rather than incremental advances. It does so collaboratively as part of a robust innovation ecosystem that includes academic, corporate, and governmental partners.

To fulfill its mission, the Agency relies on diverse performers from all of these sectors to apply multi-disciplinary approaches to both advance knowledge through basic research and create innovative technologies that address current practical problems through applied research. DARPA's scientific investigations span the gamut from laboratory efforts to the creation of full-scale technology demonstrations in the fields of biology, medicine, computer science, chemistry, physics, engineering, mathematics, material sciences, social sciences, neurosciences and more. As the DoD's primary innovation engine, DARPA undertakes projects that are finite in duration but that create lasting revolutionary change.

PREPARING FOR SUCCESS

1

DO YOUR HOMEWORK
What type of research are you doing and is DARPA a good fit? Learn about the DARPA Framework on the next page and DARPA Technology Offices on page 2. Visit the DARPA website at www.darpa.mil to learn more about the research being done within these DARPA Technology Offices.

LOOK FOR OPPORTUNITIES*
DARPA makes funding opportunities known primarily by posting Broad Agency Announcements, or BAAs.
- Information on DARPA programs and areas of research is available at www.darpa.mil, click on "Our Work" then click on the applicable Technology Office acronym.
- DARPA BAAs and RFPs can be found on the official federal acquisition opportunities web site available at www.fedbizopps.gov (type "Other Defense Agencies Defense Advanced Research Projects Agency" in the "Agency" box within the search tool) and www.grants.gov.
- DARPA SBIR/STTR topics can be found in the DoD SBIR and STTR Program Solicitations at www.dodsbir.net/solicitations.

2

ATTEND PROPOSERS DAY
Identified a BAA that you are interested in? Check to see if there is a Proposers Day (www.fedbizopps.gov and www.grants.gov). DARPA hosts Proposers Day conferences to provide information on recently released or soon-to-be released BAAs. The Proposers Day conferences are usually held at the DARPA Conference Center, Room 01-200, 675 N. Randolph Street, Arlington Virginia. The purpose of these conferences is to provide information on the program (to which the BAA applies); promote additional discussion and address questions from potential proposers. Some Proposers Day conferences also allow for registration of one-on-one meetings with the DARPA Program Manager.

3

SUBMIT A PROPOSAL
The preferred method for submitting ideas and concepts to DARPA is to respond to a Broad Agency Announcement (BAA), Small Business Innovation Research (SBIR) topics, Small Business Technology Transfer Research (STTR) topics, program research and development announcements (RAs), or other Government-initiated solicitations or programs (RFPs).

4

TAKE ADVANTAGE OF RESOURCES
Learn more about developing your business, science and technology policy, networking opportunities, and other opportunities for your business. These are just some of many available federal resources. Click on the logo to visit these websites.

5

*The majority of opportunities at DARPA are in Research/Research & Development. (R/R&D) If your business is interested in providing services, opportunities are posted at www.fedbizopps.gov. If you are a vendor, please note that DARPA generally purchases supplies /products via GSA advantage (https://www.gsaadvantage.gov). DARPA announces funding opportunities using various solicitations and announcements. All of DARPA's solicitations and announcements can be found on the Federal Business Opportunities and Grants.gov pages. DARPA primarily uses two solicitation methods: (1) Broad Agency Announcements (BAAs)/Research Announcements (RAs) and (2) Requests for Proposal (RFPs).
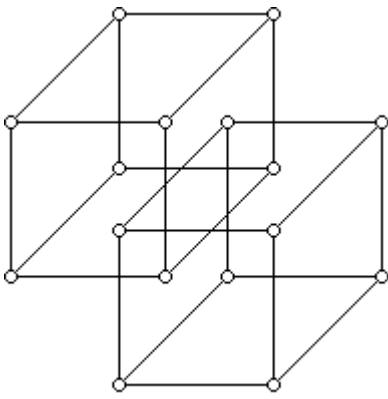
THE DARPA FRAMEWORK

DARPA's investment strategy begins with a portfolio approach. **Reaching for outsized impact means taking on risk, and high risk in pursuit of high payoff is a hallmark of DARPA's programs.** We pursue our objectives through hundreds of programs. By design, programs are finite while creating lasting revolutionary change. They address a wide range of technology opportunities and national security challenges. This assures that while individual efforts might fail—a natural consequence of taking on risk—the total portfolio delivers.

How do we create this portfolio of programs? One major part of the answer is bottom up: **DARPA program managers define and propose new programs they believe promise revolutionary change**. This is important for several reasons. An effective DARPA program manager is the person closest to the critical challenges and possible technology opportunities in his or her arena, and the personal inspiration and drive behind a novel idea is the spark needed to start a big fire.

More fundamentally, surprise rarely comes from groupthink. Yet we recognize that our work lives in a context of today's realities and tomorrow's outlook. **So a framework for DARPA—an understanding of our enduring mission in the context of the geopolitical and technological environment and its direction—is vital in shaping our portfolio.**
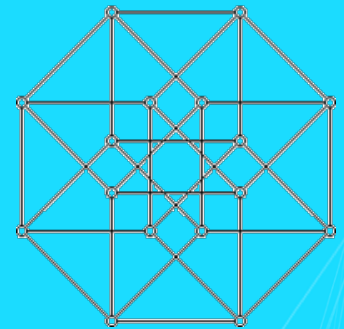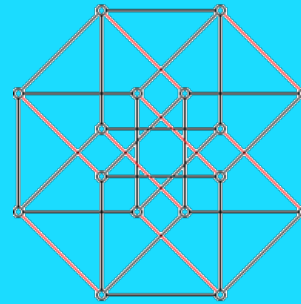
We focus on three essential, interdependent strategic objectives to carry out our mission:

1. Demonstrate breakthrough capabilities for national security
2. Catalyze a differentiated and highly capable U.S. technology base
3. Ensure DARPA itself remains robust and vibrant to deliver on its mission today and in the future.

We pursue each of these objectives in the context of our current framework. A copy of the framework is available at http://www.darpa.mil/WorkArea/DownloadAsset.aspx?id=2147486475

BROAD AGENCY ANNOUNCEMENTS (BAAs)

The Broad Agency Announcement (BAA) is a competitive solicitation procedure used to obtain proposals for basic and applied research and that part of development not related to the development of a specific system or hardware procurement. The BAA is described in FAR 6.102, "Use of Competitive Procedures," and FAR 35.016, "Broad Agency Announcements." The type of research solicited under a BAA attempts to increase knowledge in science and/or to advance the state of the art as compared to practical application of knowledge. DARPA generally uses a Program Information Pamphlet (PIP) for BAA information.

BAAs describe:
1. The agency's research interest, for either an individual program or broadly defined areas of interest covering full range of the agency's research and development efforts
2. The criteria for selecting proposals, their relative importance, and the method of the evaluation
3. The specific time available for submission of proposals
4. Specific instructions for the preparation and submission of proposals

Types of BAAs
- DARPA "Office-wide" BAAs — Each DARPA technology office has an office-wide BAA that is usually open for approximately one year. These BAAs usually cover a broad range of topics.
- DARPA Program Specific BAAs
- Pre-proposal Information
- DARPA Proposers' Days—"Proposers' days" are held after the publication of a program notice and prior to the submission of proposals. They provide the opportunity to hear, first hand, the program managers' vision for a program and meet potential industry partners for teaming. DARPA proposers' days are not limited to the promotion of BAAs; they are used for all methods of soliciting business.

BAA White Papers
White papers are the initial ideas submitted to a DARPA program manager and are not considered proposals. These papers permit the presenter to make a detailed written explanation of the idea/concept. Follow the instructions in the BAA.

Submitting a white paper can allow:
- Feedback from the DARPA program manager
- A response from a program manager expressing interest or disinterest in the concept and, if appropriate, a request for a proposal.
- Presenters can still submit a proposal despite a negative response on the associated white paper.
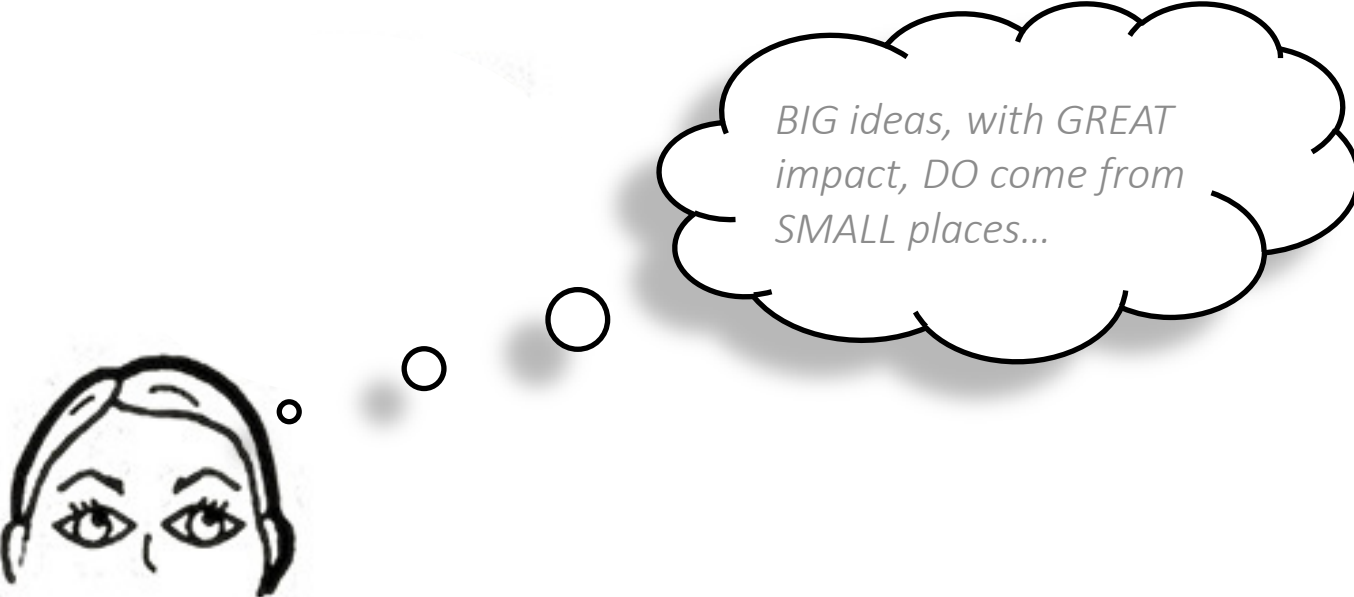
BAA Evaluation and Award
BAA proposals are reviewed based on technical merit and are not compared to other proposals. There is no common statement of work. DARPA identifies general areas of interest, but does not tell companies how to propose work or how to solve problems. Award(s) will be made to proposers whose proposals are determined to be the most advantageous to the Government, all factors considered, including the potential contributions of the proposed work to the overall research program and the availability of funding for the effort.

VISION

To create an environment within DARPA that considers small business concerns as a primary source of innovative solutions; expand small business relationships and training opportunities within DOD and other federal agencies; and enable the small business community to create and transition radical, game-changing technologies that benefit the warfighter, the federal government, and the commercial marketplace.

MISSION

Our mission is to administer & manage DARPA's small business programs, and serve the small business community by carrying out the statutory requirements of the Small Business Act to foster small business participation in providing innovative research and development solutions to achieve the DARPA mission.

BIG ideas, with GREAT impact, DO come from SMALL places...

SBIR/STTR Research Supports DARPA's Mission and Programs

Explore High Risk Concepts & Ideas Without Expense of Larger Programs

Test & Evaluate Alternatives or Solution Subsets To Reduce Risk

Provides up to $1.6M per Project for Promising Technologies

Leverages Unique Skillsets & Novel Ideas to Address High Priority Military Needs

The DARPA SBIR and STTR Programs are designed to provide small, high-tech businesses and academic institutions the opportunity to propose radical, innovative, high-risk approaches to address existing and emerging national security threats; thereby supporting DARPA's overall strategy to bridge the gap between fundamental discoveries and the provision of new military capabilities.

The responsibility for implementing DARPA's Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs rests with the Small Business Programs Office.

HOW TO PARTICIPATE

SBIR

Congress established the SBIR Program in 1982 to provide opportunities for small businesses to participate in Federal government-sponsored research and development (R&D). The goals of the SBIR Program are to: stimulate technological innovation; use small business to meet Federal R&D needs; foster and encourage participation by socially and economically disadvantaged small business concerns (SBCs), and by SBCs that are 51 percent owned and controlled by women, in technological innovation; and increase private sector commercialization of innovations derived from Federal R&D, thereby increasing competition, productivity and economic growth.

To participate in the SBIR program, a firm must:
- ✓ Be a U.S. for-profit small business with 500 or fewer employees
- ✓ Perform work in the United States
- ✓ Perform a minimum of 2/3 of the effort in Phase I
- ✓ Perform a minimum of 1/2 of the effort in Phase II
- ✓ Have the principal investigator spend more than 1/2 of the time employed by the proposing firm
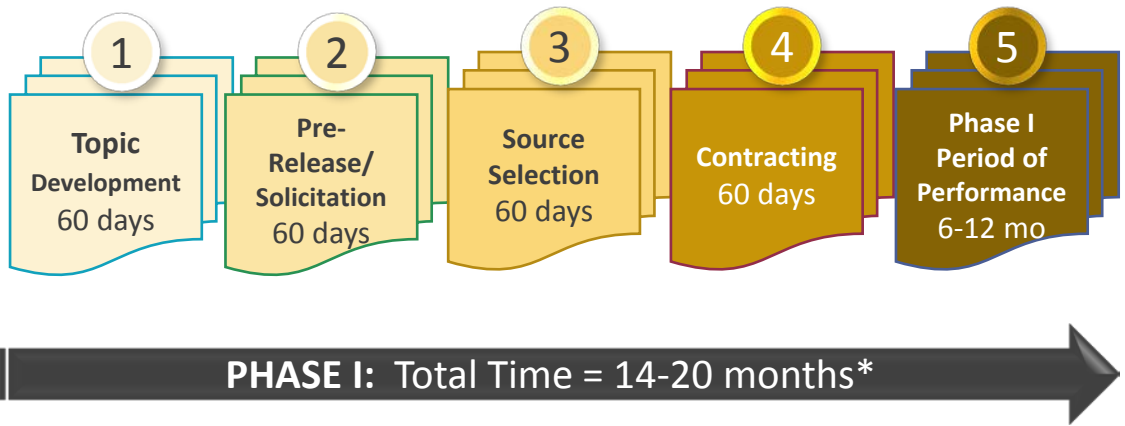
STTR

In 1992, Congress established the STTR pilot program. STTR is similar in structure to SBIR but funds cooperative R&D projects involving a small business and a research institution (i.e., university, federally-funded R&D center, or nonprofit research institution). The STTR Program is a vehicle for moving ideas from our nation's research institutions to the market, where they can benefit both private sector and military customers. The purpose of the STTR Program is to stimulate a partnership of ideas and technologies between innovative small business concerns (SBCs) and research institutions through Federally funded research or research and development (R/R&D).

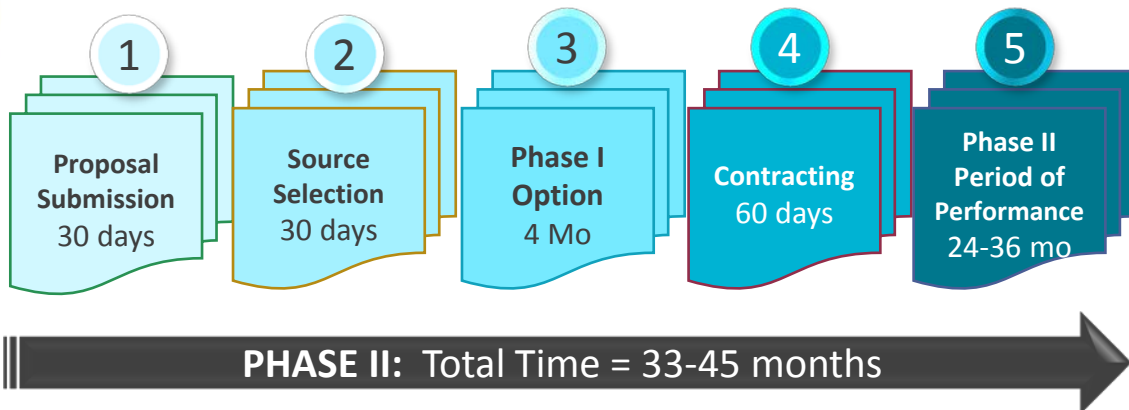**To participate in the STTR program:**
- ✓ A firm must be a U.S. for-profit small business of 500 or fewer employees; there is no size limit on the research institution
- ✓ Research institutions must be a U.S. college or university, FFRDC or non-profit research institution
- ✓ Work must be performed in the U.S.
- ✓ The small business must perform a minimum of 40% of the work and the research institution a minimum of 30% of the work in both Phase I and Phase II
- ✓ The small business must manage and control the STTR funding agreement
- ✓ The principal investigator may be employed at the small business or research institution

SBIR/STTR
Time Horizons

1 Topic Development 60 days

2 Pre-Release/ Solicitation 60 days

3 Source Selection 60 days

4 Contracting 60 days

5 Phase I Period of Performance 6-12 mo

PHASE I: Total Time = 14-20 months*

The objective of Phase I is to establish the technical merit, feasibility, and commercial potential of the proposed R/R&D efforts and to determine the quality of performance of the small business awardee organization prior to providing further Federal support in Phase II. SBIR Phase I awards normally do not exceed $100,000 total costs for 6 months (plus 4 months and an additional $50,000 for the option exercised if selected for Phase II). STTR Phase I awards normally do not exceed $100,000 total cost for 12 months (plus 4 months and an additional $50,000 for the option exercised if selected for Phase II).

1 Proposal Submission 30 days

2 Source Selection 30 days

3 Phase I Option 4 Mo

4 Contracting 60 days

5 Phase II Period of Performance 24-36 mo

**PHASE II:** Total Time = 33-45 months

The objective of Phase II is to continue the R/R&D efforts initiated in Phase I. Funding is based on the results achieved in Phase I and the scientific and technical merit and commercial potential of the project proposed in Phase II. Only Phase I awardees and proposers to Direct to Phase II topics are eligible for a Phase II award. SBIR and STTR Phase II awards normally do not exceed $1,000,000 total costs for 2 years (plus 12 months and an additional $500,000 for the option – subject to availability of funding).

DIRECT TO PHASE II: Direct to Phase II program participants can save approximately 14-20 months by "skipping" the Phase I process. These projects "skip" step 5 from the above Phase I steps and steps 1-4 of the Phase II steps. Information on Direct to Phase II may be found in the DARPA solicitation instructions available at www.dodsbir.net/solicitation.

* For illustrative purposes only – actual timeframes may vary

LEVERAGING SBIR AND STTR FOR SUCCESS

Small Businesses must ensure they are ready to accept the level of effort, commitment, and investment required to bring an idea from the lab to the marketplace.

- Understand that the DARPA SBIR/STTR process is not linear, but is a continuous, iterative journey from proof-of-concept to prototype delivery and beyond.
- Understand that some technology areas may require additional feasibility studies related to the Phase I and/or additional testing and development during or after Phase II. Do not expect to go directly from Phase I to Phase II or directly from Phase II to Transition/Commercialization.
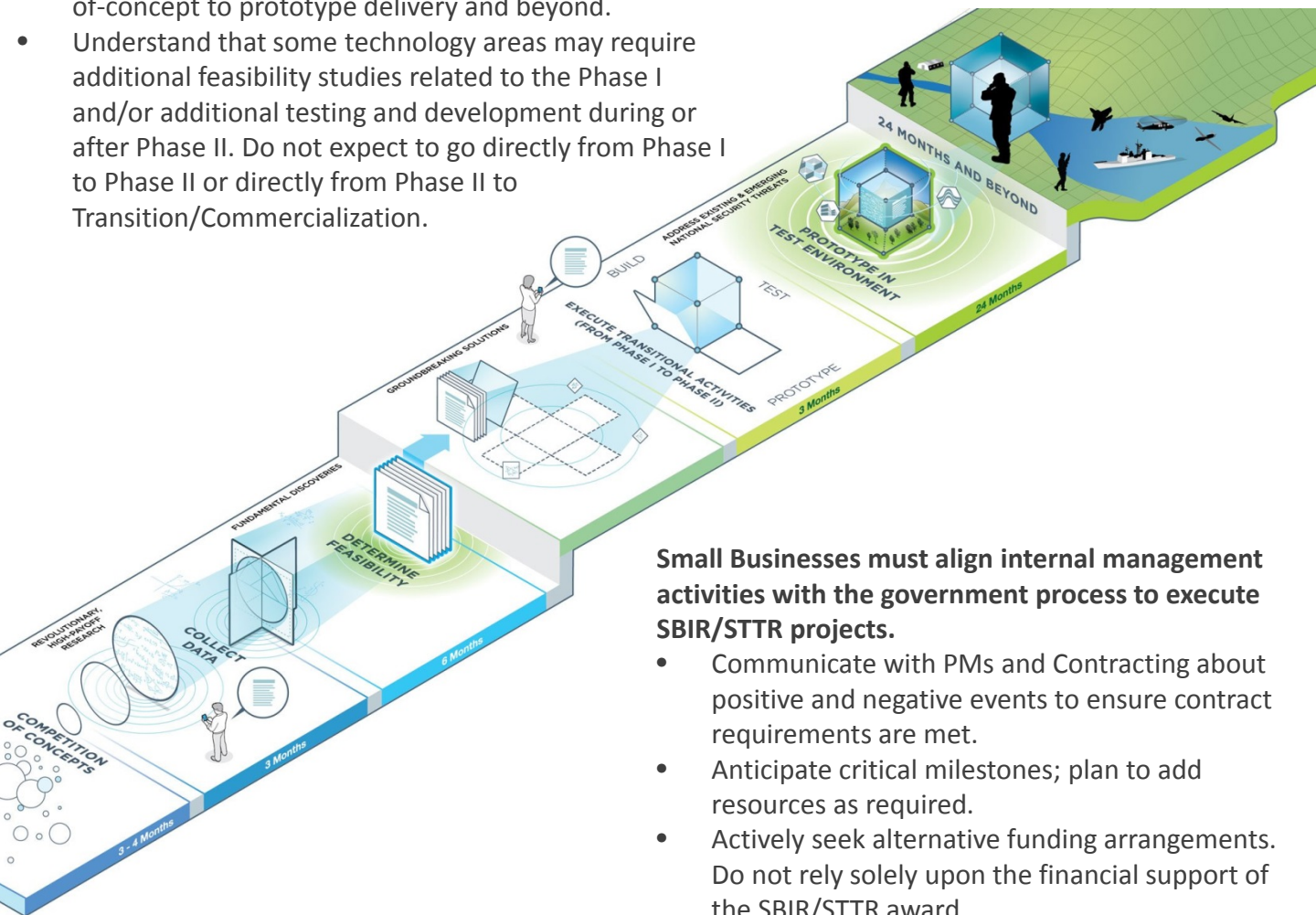
Small Businesses must align internal management activities with the government process to execute SBIR/STTR projects.

- Communicate with PMs and Contracting about positive and negative events to ensure contract requirements are met.
- Anticipate critical milestones; plan to add resources as required.
- Actively seek alternative funding arrangements. Do not rely solely upon the financial support of the SBIR/STTR award.
- Seek guidance from specialists such as attorneys, accountants, and contract administrators who can help coordinate SBIR/STTR requirements.
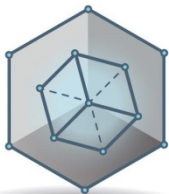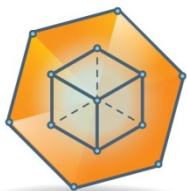
TRANSITION & COMMERCIALIZATION
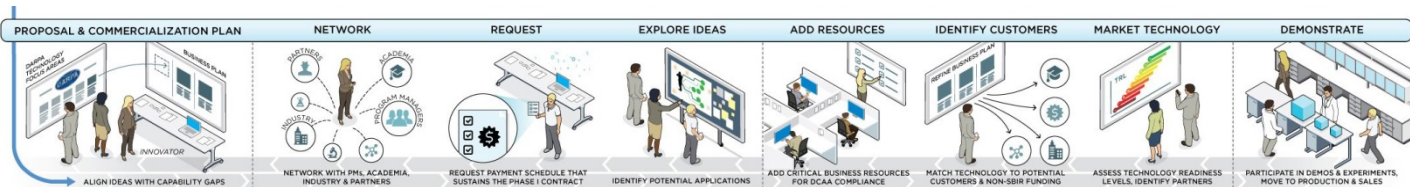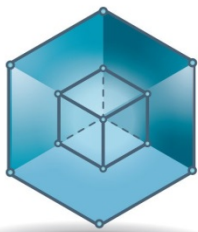
TRANSITION & COMMERCIALIZATION

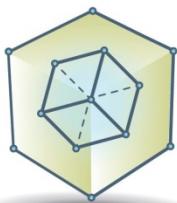Transition Innovations & Disruptive Technologies into DoD Programs or Commercial Products

Increase Private-sector Commercialization of Innovations Derived from Federal R&D Funding

DoD PLATFORMS & PROGRAMS

FEDERAL PROGRAMS

COMMERCIAL APPLICATIONS

Transition & Commercialization

In the SBIR and STTR Programs, Phase III is an objective rather than a "linear path." The objective of Phase III is for the small business to pursue commercialization objectives resulting from the Phase I/II R/R&D activities. Federal Phase III contracts may not be funded with SBIR/STTR dollars. A complete definition of Phase III as it relates to SBIR/STTR is available at http://www.acq.osd.mil/osbp/sbir/docs/SBIR_Phase_3_Brochure.pdf

Small Businesses must plan for Transition and Commercialization throughout the entire SBIR/STTR process. Explore a diverse range of applications early in the process to help identify potential customers and investors.

- Establish relationships with those who are willing and able to provide development or investment funds.
- Seek opportunities to benchmark via concept or product demonstrations, or tests in operational environments.
- Participate in the Transition and Commercialization Support Program. The SBPO, in partnership with the T2C Team, can provide support.

SBIR/STTR TRANSITION & COMMERCIALIZATION SUPPORT PROGRAM

Objective
The objective of the DARPA Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) Transition & Commercialization Support Program is to support transition and commercialization planning and implementation activities to increase the potential for a company to move its developed technology beyond Phase II and into the DoD military services, other federal agencies and/or the commercial market.

Approach
The Technology Transition and Commercialization Team (T2C Team) at Strategic Analysis, Inc. under contract to the DARPA Small Business Programs Office (SBPO), provides, at no cost to the Company, technology transition and commercialization support to small businesses that have one or more active DARPA-funded SBIR and/or STTR Phase 2 projects. A customized plan for transition and commercialization activities is developed in concert by the T2C Team and the company and is conducted during the Phase 2 contract period of performance (typically 24 months).

ADDITIONAL INFORMATION

CONTRACT MANAGEMENT

DARPA's Contracts Management Office (CMO) has the authority to enter into and administer contracts, grants, cooperative agreements, and Other Transactions in pursuit of DARPA's research and development mission. CMO's role is to serve as DARPA's acquisition advisor and make awards in select, critical technology areas. The bulk of DARPA awards are entered into on behalf of the agency by the military services, who assist DARPA with technology transition to the warfighter. Learn more about contract management and contract types here:
http://www.darpa.mil/Opportunities/Contract_Management/Contract_Management.aspx

DARPA PUBLIC RELEASE

The Public Release Center (PRC) facilitates the public release process. DoD Instruction 5230.9 mandates a security and policy review of all official DoD information intended for public release that pertains to military matters, national security issues, or subjects of significant concern to the DoD. All DoD unclassified information (such as papers, presentations, videos, images, news releases, etc.) must be reviewed before it is released to the public. Is your work considered fundamental research and exempt from public release review? Please see the DARPA Fundamental Research Site here and also review PRC resources.
http://www.darpa.mil/NewsEvents/Public_Release_Center/Public_Release_Center.aspx

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PROTECTING IDEAS

The ground rules for protecting proprietary and government information in establishing and performing agreements are based on a balancing of the following interests:
- o *National security interests*
- o *Congressional and Department of Defense directions on Intellectual Property (IP)*
- o *Protecting ideas*

Protection of Program Information
The National Security Decision Directive (NSDD) 189, September 21, 1985 states "to the maximum extent possible, the products of fundamental research remain unrestricted."   The government does not typically have a need for pre-publication approval if the program information is considered fundamental research.

Protection of Information in Submission of Proposals
- o U.S. Laws Requiring Protection of Proprietary Information:
- o The Procurement Integrity Act, 41 U.S.C.
- o 41 U.S.C. 423 addresses contractor bid and proposal information and source selection information
- o Freedom of Information Act (FOIA)
- o 5 U.S.C. 552
- o Trade Secrets Act, 18 U.S.C. 1905— prohibits unauthorized release of proprietary information by Government employees

Intellectual Property (IP)
IP includes technical data, software, patents, copyrights, trademarks, and trade secrets. OSD IP Guide "Intellectual Property: Navigating Through Commercial Waters" at www.acq.osd.mil/dpap/Docs/intelprop.pdf is applicable to procurement contracts, but provides helpful background information on all types of agreements. IP statutes like the Bayh-Dole Act, 35 U.S.C. 202-204 do not apply to OTs, so there is great flexibility in negotiating IP issues. In the traditional procurement contract, the contractor retains the title to IP and the government receives a non-exclusive, royalty free license for inventions conceived or first reduced to practice during the agreement under Bayh-Dole principles. For OTs, the parties are allowed flexibility to negotiate IP since Bayh-Dole does not apply. DARPA normally does not acquire IP rights that will impede commercialization of technology.

Foreign Access to Technology
International Traffic in Arms Regulations (ITAR) 22 C.F.R. 120-130 controls the release of defense articles specified on the U.S. munitions list; also controls defense services. ITAR—information in the public domain not subject to need for licenses for the export of technical data and classified defense articles (22 C.F.R. 125.1).

Public Domain
Public domain means information is published and is generally accessible or available to the public, including through fundamental research (22 C.F.R.
120.11).

Defense Advanced Research Projects Agency

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